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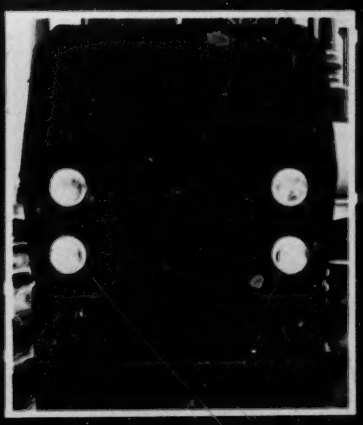

TRACTORS

Where the HP Went in 1982

Makes, Models on '83 Market

Product Liability Part II

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and circulation correspondence
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P.O. Box 12901
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listed on ad index page.)

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IMPLEMENT & TRACTOR (USPS 481-750), with which is combined Farm Implement News, is published monthly except in January and March, when two issues are published, by INTERTEC PUBLISHING CORP., 9221 Quivira Rd., Overland Park, KS 66215 (a suburb of Kansas City, Mo.).

Subscription information: Implement & Tractor is edited for persons in the farm and industrial equipment industry who function in the areas of retail sales and service, distribution sales and service, marketing, engineering, financing, manufacturing and general management. Subscription prices to qualified subscribers: U.S. one year—$10, two years—$15; elsewhere including Canada, one year—$17, two years—$25. Subscription prices to all others: U.S. one year—$34, two years—$66; elsewhere including Canada, one year—$39; two years—$75. Single copies, $2, except Annual Statistical Number, $4; Product File issue, $5; Red Book issue, $6. Adjustment necessitated by subscription termination at single copy rate. Extra charge for service on back issues. Allow 6-8 weeks for change of address and new subscriptions.

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ISSN 0019-2953/81 $2.00 + 0.00

INTERTEC PUBLISHING CORP.

Implement & Tractor

The business magazine of the farm & industrial equipment industry

April 1983 • Vol. 98 • No. 6

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8: **Affordable, Friendly Computers** are a reality, and the new technology promises even more possibilities for in-house data processing systems at many dealerships.

12: **Less Downtime for Tomorrow's Tractors?** The chances that bigger plow-pullers will stay in service longer are assessed in the conclusion of our Future Tractor series.

16: **Wage Rates for Dealership Employees.** A look at average hourly pay scales in 12 states for 1981 and 1982. How does your compensation plan stack up?

18: **Annual Planning Pays Off.** John Romsdal learned the value of thinking ahead, and shares his ideas with other dealers.

20: **Ford's 1983 Model Introduction.** Some new blue tractors were displayed, but the big news was a 3-year warranty program.

28: **Where Horsepower Sales Went in 1982.** This annual summary of FIEI figures shows the sales distribution of tractors by horsepower range across the 50 states.

30: **Tractors on the Market, 1983.** All agricultural tractors sold in North America, listed brand-to-brand, side-by-side and top-to-bottom, in 2- and 4-wheel drive. Suitable for framing.

On the cover... Just a glimpse at a few of the makes and models of tractors offered on the 1983 North American market.

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This publication is indexed in Bell & Howell's Farm & Garden Index.

Second class postage paid at Shawnee Mission, KS 66201. Postmaster: Return Form 3579 to Implement & Tractor, P.O. Box 12954, Overland Park, KS 66212

What's Ahead...

April 1983

FEBRUARY U.S. RETAIL SALES IMPROVED IN SOME CATEGORIES, according to the flash report of the Farm & Industrial Equipment Institute:

	Unit Retail Sales					
	February			January-February		
	1983	1982	Pct. Change	1983	1982	Pct. Change
Farm Wheel Tractors:						
2-wheel drive						
Under 40 hp	2,256	2,177	+ 3.6	4,324	4,575	- 5.5
40 to 100 hp	2,492	2,487	+ .2	5,082	5,913	-14.1
100 to 140 hp	1,010	1,459	-30.8	2,429	3,958	-38.6
Over 140 hp	536	779	-31.2	1,462	2,033	-28.3
Total 2-wheel drive	6,294	6,902	- 8.8	13,297	16,484	-19.3
4-wheel drive						
Under 200 hp	74	324	-77.2	260	627	-57.9
Over 200 hp	118	244	-51.6	324	613	-47.1
Total 4-wheel drive	192	568	-66.2	584	1,230	-52.5
Total Tractors	6,486	7,470	-13.2	13,881	17,714	-21.6
Combines (S-P)	707	510	+38.6	2,503	1,884	+32.9
Balers*	324	202	+60.4	715	598	+19.6
Forage Harvesters**	147	128	+14.8	318	448	-29.0
Mower-Conditioners	407	367	+10.9	970	1,007	- 3.7

*Bales under 200 lbs. **Shear-bar type.

THERE WILL BE AN ANNUAL NEED FOR 59,780 AG SCHOOL GRADUATES through 1985, according to T. B. Kinney, Jr., administrator of the USDA Ag Research Service, but there will be only 51,976 actual ag graduates yearly through the period. Enrollment in ag schools has been in decline since 1978.

FARM EQUIPMENT DEALERSHIP CLOSINGS, 1981-1982, as tallied from a survey by the Farm Equipment Manufacturers Assn. of state, provincial and regional dealer association managers in North America: For the 24 months, 880 dealers out. For the first half of 1982, 249 out; for the second half, 205. International Harvester has pointed out to I&T on several occasions that its net losses were not as severe as the survey indicated; e.g., net dealer loss in the first half of 1982 was 41.

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1982 Wages, Shop Rates, and How They Changed

		Summary 316 dealers	No. & So. Carolina 48 dealers	Ohio 84 dealers	Wisconsin 149 dealers	Pacific Northwest 35 dealers	Far West for comparison only 86 dealers
Labor Rate	'82	$19.38	18.31	19.72	19.54	n/a	28.22
	'81	18.76	18.03	19.16	18.78		
Pct. change		3.30% see note	1.50%	2.90%	4.00%		
Service Manager	'82	8.16	8.42	7.56	7.89	10.38	9.11
	'81	7.50	7.77	7.39	6.82	10.26	
Pct. Change		8.80%	8.40%	2.30%	15.70%	1.10%	
Regular Mechanic	'82	6.06	6.06	5.66	5.77	8.26	7.84
	'81	5.90	5.82	5.49	5.73	7.69	
Pct. Change		2.70%	4.10%	3.10%	0.70%	7.40%	
Set-Up; Helper	'82	5.19	4.59	5.34	4.99	6.50	n/a
	'81	5.08	4.25	5.27	4.92	6.45	
Pct. Change		2.20%	8.00%	1.30%	1.40%	0.80%	
Truck Driver	'82	5.83	5.34	5.84	5.58	7.56	8.21
	'81	5.56	4.50	5.51	5.50	7.43	
Pct. Change		4.90%	18.60%	6.00%	1.50%	1.70%	
Parts Manager	'82	6.93	6.46	6.65	6.65	9.42	8.28
	'81	6.71	6.17	6.67	6.31	9.26	
Pct. Change		3.30%	4.70%	−0.30%	5.40%	−1.70%	
Partsman	'82	5.83	5.88	5.69	5.60	7.10	6.99
	'81	5.39	4.94	5.64	5.32	7.05	
Pct. Change		8.20%	19.00%	0.90%	5.30%	0.70%	
Salesman	'82	see	16,522	20,400	19,800	23,570	19,257
	'81	note	16,809	19,775	'81 n/a	23,000	28,575
Pct. Change			−1.70%	3.20%		2.50%	−32.60%

Sources: Carolinas Farm & Power Equipment Dealers Assn., Inc., covering North and South Carolina; Ohio Assn. of Farm & Power Equipment Retailers; Wisconsin Farm Equipment Assn.; Pacific Northwest Hardware & Implement Assn., covering Alaska, Idaho, Oregon and Washington; Far West Equipment Dealers Assn., covering Arizona, California, Hawaii and Nevada.

Notes: Labor rate summary excludes Pacific Northwest. No summary for salesmen because total number of salesmen reported not available.

All figures express mean (average) except Far West, which reports the median (middle number in a series.) In statistically normal distribution, mean and median are equal.

For ease of comparison, annual salary figures for managers were converted to hourly rates based on 2,000 working hours: 40 hrs. per week, 50 weeks per year. Reports generally showed managers work 8 to 12 more hours per week, but receive vacations longer than 2 weeks.

Dealership Wages Rose in 1982, But Some Salesmen Suffered

■IT WAS a "blah" year for equipment salesmens' salaries, and 1982 provided generally modest increases in wages and labor rates at agricultural dealerships, according to surveys pulled together by *Implement & Tractor.*

Figures provided by five dealer associations covering 12 states fell short of giving a full national picture, but offer plenty of insights in to what various jobs paid in 1982 compared with 1981.

There is no uniform survey and reporting method used by associations, and some surveys may have included industrial and lawn-and-garden shops along with agricultural dealerships. Thus, the results can't be taken as gospel. But surprising consistency within some job categories tends to support the validity of the figures.

Wages reported here are averages, and do not show the wide range of pay found in most job categories. Benefits like profit sharing, vacations, company cars and insurance are also not included.

Survey information for the Far West was included for comparison only, but not included in the Summary column. Far West made major changes in reporting between 1981 and 1982, making comparisons difficult. Far West also reports a different statistical measure from the other associations. I&T

FARM TRACTOR SALES: WHERE

■LAST YEAR, when I&T published this table, we estimated that units of horsepower sold in 1981 came to approximately 9.4 million, compared with 10.9 million in 1980.

Reviewing the process we followed at that time, it seems likely that our estimates for those two years were probably a little too liberal, and that 9.2 milion for 1981 and 10.6 million for 1980 would have been more accurate.

As for 1982, using our more conservative method of estimating, we are setting the total units of horsepower sold at 8.03 million.

All horsepower brackets shared in the unit sales volume decline, which, at 77,144, was off by 25.7 per cent from the previous year. As for states, some fared worse than others, and only two—New Hampshire and New Jersey—showed an improvement in unit sales. (The U.S. government also showed an increase—from 17 to 98 units!)

Inventories

Reduced sales volumes were accompanied by changes in levels of inventory. In terms of total farm tractor units, the sales decline of 25.7 per cent was accompanied by an inventory reduction of 9 per cent.

However, the reductions were not uniform, and in some horsepower groups, the inventory levels went up. Inventories of tractors in the 40-69 horsepower brackets declined from 24,914 units as of Dec. 31, 1981, to 18,487 twelve months later. For the 70-99-hp group, the decline was from 13,531 to 11,256. And four-wheel-drive tractor inventory levels came down from 6,695 units to 5,421 in 1982.

As for two-wheel-drive, over-100-hp tractors, there was a slight reduction in the 100-129-hp group, from 10,685 to 10,572 units. There was a greater reduction in the 130-149-hp bracket—from 13,614 to 11,951. But for two-wheelers of 150 or more horsepower, the inventory level rose from 10,549 to 13,852 units.

	Two-Wheel-Drive Tractors						
State	40-49	50-59	60-69	70-79	80-89	90-99	100-119
Alabama	366	184	124	94	101	21	56
Alaska	3	1	3	.....	.....	1	1
Arizona	41	12	51	28	75	25	48
Arkansas	499	206	185	77	67	18	62
California	378	403	651	390	471	75	179
Colorado	46	59	57	22	46	20	53
Connecticut	38	25	25	12	24	7	6
Delaware	8	13	10	8	9	1	13
Florida	319	230	288	332	201	15	100
Georgia	549	240	231	152	164	27	82
Hawaii	9	12	2	5	2	.....	4
Idaho	48	63	79	32	85	38	106
Illinois	161	186	252	191	259	74	308
Indiana	137	140	168	96	211	29	140
Iowa	65	108	221	171	387	131	603
Kansas	64	63	89	59	138	87	302
Kentucky	826	520	403	235	263	60	108
Louisiana	488	171	187	213	67	22	55
Maine	54	58	41	12	28	4	29
Maryland	106	91	57	41	73	12	50
Massachusetts	35	43	19	20	15	3	6
Michigan	161	191	237	139	218	66	164
Minnesota	61	123	222	147	367	150	444
Mississippi	397	166	191	165	91	17	71
Missouri	334	239	346	136	274	79	227
Montana	109	49	87	40	93	28	91
Nebraska	25	38	43	36	150	86	352
Nevada	9	13	18	2	4	5	4
New Hampshire	44	48	26	12	16	4	5
New Jersey	95	51	25	18	20	6	9
New Mexico	48	33	22	45	5	11	18
New York	163	257	267	182	397	83	178
North Carolina	598	322	231	121	284	42	121
North Dakota	9	25	30	19	66	33	199
Ohio	237	233	269	169	227	61	181
Oklahoma	334	172	171	96	134	84	234
Oregon	213	182	123	43	84	28	61
Pennsylvania	246	250	310	122	259	79	134
Rhode Island	6	1	2	2	1	.....	.....
South Carolina	222	108	92	64	91	9	30
South Dakota	10	22	27	25	159	90	268
Tennessee	609	355	253	102	170	38	83
Texas	1,690	672	959	584	482	179	363
Utah	48	87	70	40	46	22	50
Vermont	31	50	54	19	46	6	16
Virginia	437	250	214	115	214	22	78
Washington	368	322	160	72	73	18	36
West Virginia	120	71	75	20	22	4	9
Wisconsin	88	203	369	282	568	158	412
Wyoming	17	16	22	11	38	20	34
U.S. Government	2	.....	2	92	.....	.....	2
Miscellaneous	39	28	27	122	16	.....	.....
TOTAL	**11,011**	**7,405**	**8,087**	**5,232**	**7,301**	**2,098**	**6,185**

Turn page for: **FARM TRACTORS,** Makes & Models on the 1983 North American Market

AND WHAT HORSEPOWER, 1982

1982 Retail Sales of Farm Wheel Tractors by PTO Horsepower (in units)

120-129	130-139	140-149	150-179	180 & over	Total 2-Wheel Drive	Four-Wheel Drive Tractors: Under 200	200-249	250 & over	Total 4-Wheel Drive	All Farm Wheel Tractors	State
5	79	11	47	20	1,108	8	5	1	14	1,122	Alabama
.....	.....	.....	1	.....	10	.....	.....	.....	...	10	Alaska
5	46	1	29	64	425	36	11	26	73	498	Arizona
13	144	49	194	258	1,772	26	59	40	125	1,897	Arkansas
38	169	14	125	83	2,976	67	84	100	251	3,227	California
22	160	16	70	63	634	37	39	45	121	755	Colorado
.....	7	.....	1	.....	145	2	.....	.....	2	147	Connecticut
5	5	.....	2	5	79	4	1	.....	5	84	Delaware
15	79	23	25	9	1,636	39	12	4	55	1,691	Florida
31	169	25	83	68	1,821	9	9	9	27	1,848	Georgia
.....	2	.....	.....	1	37	.....	.....	2	2	39	Hawaii
55	149	18	118	21	812	67	87	43	197	1,009	Idaho
145	868	90	697	349	3,580	267	187	146	600	4,180	Illinois
88	367	44	265	122	1,807	126	100	63	289	2,096	Indiana
210	1,453	174	579	217	4,319	255	147	73	475	4,794	Iowa
107	658	68	448	270	2,353	222	202	91	515	2,868	Kansas
19	80	6	47	42	2,609	8	10	5	23	2,632	Kentucky
10	121	22	123	128	1,607	17	20	29	66	1,673	Louisiana
1	14	.....	1	.....	242	3	.....	.....	3	245	Maine
12	32	5	8	5	492	6	5	3	14	506	Maryland
.....	1	1	1	.....	144	1	.....	.....	1	145	Massachusetts
36	228	27	108	38	1,613	125	52	20	197	1,810	Michigan
99	731	84	289	76	2,793	235	144	100	479	3,272	Minnesota
4	110	18	193	140	1,563	34	18	19	71	1,634	Mississippi
88	400	52	216	140	2,531	100	60	49	209	2,740	Missouri
46	110	9	61	31	754	106	109	109	324	1,078	Montana
95	798	78	421	215	2,337	115	72	39	226	2,563	Nebraska
1	4	1	3	2	66	4	1	.....	5	71	Nevada
.....	2	.....	1	.....	158	.....	.....	.....	.....	158	New Hampshire
4	11	.....	8	2	249	1	.....	.....	1	250	New Jersey
8	47	2	33	14	286	1	10	3	14	300	New Mexico
30	129	11	32	12	1,741	45	23	9	77	1,818	New York
20	121	29	67	66	2,022	19	10	5	34	2,056	North Carolina
91	453	31	271	95	1,322	302	238	200	740	2,062	North Dakota
71	280	41	145	59	1,973	88	53	23	164	2,137	Ohio
53	361	21	159	72	1,891	127	104	48	279	2,170	Oklahoma
11	72	5	39	7	868	42	23	19	84	952	Oregon
35	112	4	18	6	1,575	16	9	1	26	1,601	Pennsylvania
.....	.....	.....	.....	.....	12	.....	.....	.....	.....	12	Rhode Island
7	74	13	31	38	779	6	7	4	17	796	South Carolina
87	423	21	181	42	1,355	106	80	52	238	1,593	South Dakota
18	132	11	95	57	1,923	9	11	9	29	1,952	Tennessee
109	807	108	513	420	6,886	115	98	86	299	7,185	Texas
14	56	5	22	6	466	10	5	8	23	489	Utah
5	9	4	3	2	245	8	.....	.....	8	253	Vermont
11	68	6	21	19	1,455	12	2	1	15	1,470	Virginia
11	58	7	30	13	1,168	49	61	24	134	1,302	Washington
.....	3	1	.....	.....	325	1	.....	.....	1	326	West Virginia
128	422	39	146	45	2,860	117	35	15	167	3,027	Wisconsin
7	31	4	19	5	224	28	11	5	44	268	Wyoming
.....	.....	.....	.....	.....	98	.....	.....	.....	.....	98	U.S. Government
.....	1	.....	1	.....	234	.....	.....	.....	.....	234	Miscellaneous
1,870	**10,656**	**1,199**	**5,990**	**3,347**	**70,381**	**3,021**	**2,214**	**1,528**	**6,763**	**77,144**	**TOTAL**

DATA: Farm & Industrial Equipment Institute. Figures do not include garden tractors, motor tillers, or contractor's off-highway types. Report includes units marketed by these firms: Allied Farm Equip. (Leyland, Satoh); Allis-Chalmers; Belarus; J I Case; Deere; Deutz; Ford; International Harvester; Long; Massey-Ferguson; Steiger; Versatile; R.M. Wade (Satoh); and White. Sales reported as miscellaneous are retail sales which cannot be classified by state or as U.S. Government. They include sales and dispositions that do not go through usual marketing channels such as gifts to non-profit organizations, intra-plant or company transfers, etc.

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RETAIL SALES OF SELECTED FARM EQUIPMENT — Jan.-Dec. 1982(1)

(In Units)

	Combines S-P	Corn Heads	Hay Balers(2)	Windrowers Self-Propelled Power Units	Windrowers Self-Propelled Total Heads	Grinder-Mixers	Shear-Bar Forage Harvesters(3)	Mower Conditioners, All Types	Manure Spreaders Conveyor-Type
Alabama	113	29	105	1	1	74	35	112	4
Alaska	.....	.....	12	.....	.....	1	1	6	.....
Arizona	31	5	26	34	47	8	9	9	2
Arkansas	308	7	102	.....	.....	48	7	239	56
California	183	49	141	172	191	7	54	35	59
Colorado	228	114	332	159	170	34	61	106	41
Connecticut	1	.....	39	.....	.....	1	34	73	65
Delaware	15	10	11	.....	.....	7	2	7	24
Florida	40	17	64	2	2	13	26	65	21
Georgia	383	122	148	1	2	129	53	157	25
Hawaii	.....	.....	.....	.....	.....	.....	.....	1	.....
Idaho	291	9	367	209	215	26	26	109	95
Illinois	1,714	1,790	199	7	8	312	140	464	455
Indiana	721	775	186	4	5	205	88	329	320
Iowa	1,895	1,904	231	82	102	749	278	689	1,260
Kansas	1,377	141	218	140	158	160	126	485	156
Kentucky	178	117	186	4	6	177	105	619	213
Louisiana	128	6	66	.....	.....	12	13	50	17
Maine	4	5	46	2	2	8	30	70	74
Maryland	75	85	73	9	10	34	53	97	144
Massachusetts	.....	1	35	.....	.....	3	33	56	45
Michigan	263	273	230	29	28	151	208	384	477
Minnesota	1,013	734	447	349	383	392	458	745	1,186
Mississippi	236	8	73	1	1	39	36	60	20
Missouri	732	255	246	16	20	304	77	901	232
Montana	397	3	205	303	369	49	34	148	39
Nebraska	1,143	809	143	179	213	346	239	412	281
Nevada	2	.....	29	46	50	1	5	9	9
New Hampshire	.....	1	25	.....	.....	.....	17	62	41
New Jersey	6	10	32	2	2	9	10	36	43
New Mexico	33	3	121	39	39	5	16	26	2
New York	90	97	519	37	38	84	440	727	1,224
North Carolina	295	254	189	.....	.....	93	71	261	105
North Dakota	910	73	32	472	549	91	81	186	81
Ohio	382	405	301	9	9	220	154	547	548
Oklahoma	559	13	216	78	92	72	22	415	36
Oregon	130	16	209	127	145	10	21	115	74
Pennsylvania	108	131	548	35	37	242	351	775	965
Rhode Island	.....	.....	2	.....	.....	.....	.....	5	2
South Carolina	133	55	51	.....	.....	54	21	107	24
South Dakota	450	222	69	395	432	196	230	171	175
Tennessee	165	45	216	.....	.....	167	97	556	100
Texas	759	145	478	61	69	161	39	943	118
Utah	27	5	258	76	84	16	45	148	66
Vermont	3	3	69	4	4	.....	81	129	175
Virginia	112	95	198	4	5	82	119	517	180
Washington	207	22	218	76	89	10	55	112	69
West Virginia	5	3	95	1	1	21	24	129	44
Wisconsin	313	413	966	204	215	344	997	1,523	1,783
Wyoming	46	15	135	104	128	14	23	52	24
U.S. Government	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miscellaneous (4)	1	.....	.....	1	1	.....	.....	2	.....
TOTAL	**16,205**	**9,294**	**8,905**	**3,474**	**3,922**	**5,178**	**5,145**	**13,981**	**11,201**

Data released Feb. 25, 1983, Farm & Industrial Equipment Institute.

(1) Includes revisions for prior months.
(2) For making bales of under 200 lbs.
(3) Pull-type, mounted, self-propelled
(4) Sales reported as miscellaneous are retail sales which cannot be classified by state or as U.S. Government. They include sales and dispositions that do not go through usual marketing channels such as gifts to non-profit organizations, intra-plant or company transfers, etc.

AUCTION PRICES OF USED EQUIPMENT

An exclusive I&T monthly report of actual prices paid recently at these leading national wholesale auctions.

Asterisk beside tractor price indicates highest bid offered on tractors which were not sold.

JONES FARM EQUIPMENT CO.
Dothan, Alabama
February 8, 1983

ALLIS-CHALMERS TRACTORS

5030 diesel, 1981 (Good) 3950*
CA, 1951 (Rough) 295
CA, cult., plt., 1951 (Fair) 460*
B, cult., 1953 (Rough) 350
B, 1952 (Rough) 225

CASE TRACTOR

870 diesel, 1972 (Good) 3950

DAVID BROWN TRACTORS

1200 diesel, 1968 (Fair) 1900
990 diesel, 1967 (Fair) 1400*
885 diesel, 1976 (Excellent) 4000

MASSEY-FERGUSON TRACTORS

1085 diesel, 1975 (Good) 6550
275 diesel, 1976 (Good) 6425
265 diesel, 1976 (Good) 5700
245 diesel, 1979 (Excellent) 6625
245 diesel, 1977 (Good) 5200
235 diesel, 1976 (Good) 4100*
180 diesel, 1966 (Good) 3500
175 diesel, 1970 (Fair) 3250
175 diesel, 1966 (Good) 2950
175 diesel, 1966 (Good) 2800
165 diesel, 1974 (Good) 3600*
165 diesel, 1966 (Good) 3400*
165 diesel, 1966 (Fair) 2900*
165 diesel, 1966 (Good) 3500
165 diesel, 1966 (Good) 3300
135 diesel, 1966 (Rough) 2000
135 diesel, 1966 (Good) 2850
35, 1963 (Good) 1900*
35 diesel, 1963 (Excellent) 2450
35 diesel, 1962 (Good) 2175*
35 diesel, 1962 (Good) 1700
35, 1957 (Fair) 1350
35, 1957 (Good) 1650
TO30, 1952 (Good) 900
TO20, 1950 (Fair) 800
TO20, 1950 (Fair) 700
TO20, 1950 (Good) 1150*
TE20, 1948 (Fair) 675
TE20, 1948 (Fair) 700

FORD-FERGUSON TRACTOR

9N, 1945 (Fair) 675

FORD TRACTORS

8600 diesel, 1975 (Good) 6400*
5000 diesel, 1972 (Excellent) 4700
5000 diesel, 1971 (Good) 4000
5000 diesel, 1966 (Rough) 1800*
5000 diesel, 1966 (Rough) 1475
4000 diesel, 1974 (Excellent) 4650
4000 diesel, 1972 (Excellent) 4600
4000 diesel, 1971 (Good) 4900
4000 diesel, 1968 (Rough) 2300*
4000 diesel, 1967 (Fair) 3300*
4000 diesel, 1965 (Rough) 2325
3000 diesel, 1978 (Fair) 3300
3000 diesel, 1969 (Fair) 3100*
3000 diesel, 1968 (Excellent) 3650
3000 diesel, 1967 (Rough) 1400
3000 diesel, 1966 (Good) 2900
2000, 1964 (Excellent) 2800
850, 1956 (Fair) 1325*
850, 1956 (Excellent) 2400*
841, 1958 (Rough) 825
841 diesel, 1958 (Fair) 1350
660, 1957 (Excellent) 2800
650, 1955 (Good) 1725
Major diesel, 1956 (Rough) 350
Major diesel, 1956 (Rough) 435
Major diesel, 1954 (Rough) 425
NAA, 1954 (Fair) 1300
NAA, 1954 (Good) 1650
Jub., 1953 (Good) 1500*
Jub., 1953 (Fair) 1375
Dexta, 1958 (Fair) 1250*
Dexta, 1958 (Fair) 1350
Dexta, 1958 (Good) 1550*
Dexta, 1958 (Fair) 950
8N, 1952 (Excellent) 1900*
8N, 1952 (Excellent) 2000*
8N, 1951 (Good) 1550
8N, 1951 (Good) 1400
8N, 1948 (Excellent) 1950
8N, 1948 (Good) 1450
8N, 1948 (Good) 1375*
8N, 1948 (Excellent) 2000*
8N, 1948 (Rough) 500

INTERNATIONAL HARVESTER TRACTORS

766 diesel, 1974 (Fair) 4200
634 diesel, (Rough) 1100
424 diesel, 1967 (Good) 1800
424 diesel, 1966 (Good) 1550
B414 diesel, 1964 (Excellent) 1985
B414 diesel 1963 (Good) 1650
3800 diesel, ldr., backhoe, 1968 (Excellent) 5500
Sup., C, cult., 1953 (Good) 800*
140, cult., 1970 (Excellent) 2400
A, cult., 1944 (Good) 400
Cub, Loboy, mo., 1964 (Excellent) 1875
Cub, 1948 (Fair) 590

JOHN DEERE TRACTORS

5020 diesel, 1966 (Rough) 1500
4430 diesel, 1976 (Good) 12,500
4320 diesel, 1971 (Good) 6500*
4030 diesel, 1976 (Good) 7400*
4030 diesel, 1974 (Good) 7700*
4030 diesel, 1974 (Fair) 6500*
4020 diesel, 1970 (Fair) 5100*
4020 diesel, 1966 (Rough) 1950
2840 diesel, 1978 (Good) 8000
2630 diesel, 1974 (Good) 5100*
2030 diesel, 1972 (Good) 4900*
2010, ldr., 1962 (Fair) 1400
2010 diesel, 1962 (Fair) 1000
1520 diesel, 1972 (Excellent) 4400*
1520 diesel, 1972 (Excellent) 4500*
1520 diesel, 1971 (Good) 3800
1020 diesel, 1970 (Good) 3600*
830 diesel, 1974 (Good) 4100*
420, LP, 1958 (Good) 1200
420, 1957 (Rough) 250
301 diesel, 1975 (Excellent) 4200
70 diesel, 1954 (Fair) 525
40, 1954 (Good) 950
A, 1951 (Fair) 400*
A, LP, 1943 (Rough) 175
LA, 1944 (Fair) 250

OLIVER TRACTOR

60, mo., (Fair) 200

ENLOW AUCTION CO.
Tulsa, Oklahoma
February 1983

ALLIS-CHALMERS TRACTORS

D-14, mo. 1960 (Good) 2150
D-19 diesel, 1959 (Good) 2150
5020, 1978 (Excellent) 4200

CASE TRACTORS

930 diesel, 1963 (Fair) 2900*
580 diesel, ldr., 1970 (Good) 5800
1370 diesel, cab, 1975 (Good) 7800

DAVID BROWN TRACTOR

990, 1968 (Good) 2800

FORD TRACTORS

9N, 1943 (Fair) 800*
9N, 1943 (Good) 1250
9N, 1944 (Rough) 650*
9N, 1945 (Good) 1300
9N, 1946 (Good) 1200*
9N, 1946 (Fair) 900*
9N, 1946 (Good) 1100
8N, 1947 (Fair) 1000*
8N, 1947 (Good) 1475
8N, 1948 (Good) 1300
8N, 1948 (Good) 1575
8N, 1949 (Good) 1500
8N, 1949 (Fair) 1125
8N, 1949 (Good) 1300
8N, 1949 (Good) 1600
8N, 1950 (Good) 1350
8N, 1951 (Good) 1300
8N, 1952 (Good) 1750
8N, 1952 (Good) 1550
8N, 1952 (Good) 1500
NAA, 1953 (Fair) 1650
NAA, 1953 (Good) 2275
NAA, ldr., 1953 (Good) 2400
NAA, ldr., 1953 (Good) 2500
NAA, 1953 (Good) 2300
640, 1955 (Fair) 1800
640, 1956 (Good) 2150
641, 1958 (Fair) 1700*
641, 1958 (Good) 2400
641, 1960 (Good) 2250*
641, 1960 (Good) 2450
850, 1956 (Good) 2550
801, 1959 (Good) 2600
801, 1960 (Fair) 1950
841, 1960 (Good) 2575
Mjr. diesel, 1957 (Rough) 625
2000, 1964 (Good) 2575
2000, 1964 (Good) 2300
3000, 1966 (Good) 3000
3600 diesel, 1978 (Good) 6350*
8000 diesel, 1969 (Fair) 3700
9600 diesel, 1975 (Fair) 5600*

FERGUSON TRACTORS

20, 1948 (Fair) 1050
20, 1948 (Fair) 1000
20, 1951 (Good) 1425
30, 1952 (Rough) 750

OLIVER TRACTOR

55, ldr., 1955 (Fair) 1525

(More...)

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Auctions *(continued)*

INTERNATIONAL HARVESTER TRACTORS

Cub Loboy, 1957 (Good) 1700
Cub Loboy, 1961 (Good) 2250*
154 Cub, 1969 (Good) 2150*
A, 1945 (Good) 675
A, mo., 1947 (Good) 1000
Super A, 1952 (Fair) 600*
Super A, 1954 (Good) 1000*
300, 1955 (Good) 1600
340, 1960 (Good) 1650
340 diesel, 1961 (Good) 2450
460, idr., 1959 (Fair) 1800*
2400 A, idr., 1969 (Good) 4200
624 diesel, 1968 (Good) 2800
544, idr., 1972 (Good) 4100
606, 1966 (Fair) 3100
706, 1963 (Rough) 2000
2606, 1965 (Good) 2650

JOHN DEERE TRACTORS

MT, 1950 (Good) 675
MT, mo., 1951 (Good) 925
50, 1954 (Good) 1450*
70, 1953 (Fair) 1350
430, 1958 (Good) 1800*
1010, 1963 (Good) 1900*
850 diesel, 1978 (Good) 4900*
1530 diesel, 1975 (Good) 4800*
2020, 1971 (Fair) 3600
4020 diesel, 1969 (Good) 5000*

LONG TRACTOR

460 diesel, 1980 (Salvage) 2500

MASSEY-FERGUSON TRACTORS

35 diesel, 4-cyl. 1960 (Fair) 1100*
35, 1961 (Good) 2300
35, 1961 (Good) 2150
35, 1963 (Good) 2300
35 diesel, 1963 (Good) 2500
50, 1963 (Good) 2900
65 diesel, 1959 (Good) 2500*
65, 1961 (Good) 2250
65, 1961 (Fair) 1750*
65 diesel, 1962 (Good) 2700*
135, 1966 (Good) 2725*
135, 1970 (Good) 3300
135, idr., 1970 (Good) 3800
135, 1971 (Good) 3400
165 diesel, 1966 (Fair) 2850*
165 diesel, 1967 (Good) 3300*
165 diesel, 1969 (Good) 4050
165 diesel, 1969 (Fair) 3150*
180 diesel, 1966 (Good) 3200*
180, 1967 (Good) 2500
230 diesel, 1977 (Good) 6000
275 diesel, 1976 (Good) 6200*
285 diesel, 1981 (Excellent) 13,200*
1100 diesel, 1967 (Fair) 4050*
1100 diesel, 1968 (Good) 4700
1105 diesel, 1976 (Good) 7800*
40, idr., 1969 (Good) 5800

MINNEAPOLIS-MOLINE TRACTORS

Jet Star, 1959 (Fair) 925
Jet Star 3, 1967 (Good) 1850
U-302 diesel, cab, 1968 (Good) 3700
M-670 diesel, 1970 (Good) 4000
G-900 diesel, 1967 (Good) 2600

YODER & FREY, INC.
Archbold, Ohio
February 7 & 8, 1983

INTERNATIONAL HARVESTER TRACTORS

Sup. A, cult., ... 1450
M, 1949 (Fair) 775
M, 1950 (Good) 800*
Sup. M, 1952 (Rough) 925
300, 1958 (Fair) 825*
300, 1963 (Fair) 735
300, 1954 (Good) 725
340, mo., 1963 (Fair) 1200*
400 diesel, 1963 (Fair) 825*
400, 1956 (Fair) 825
450 diesel, 1957 (Rough) 750*
460 utility, 1960 (Rough) 1200*
460, 1960 (Fair) 1400
464, (Rough) 2250*
656 diesel, 1970 (Good) 4075
656, 1971 (Rough) 2650
674, 1975 (Good) 4250*
706, 1964 (Fair) 2475
706, 1964 (Fair) 2200
706 diesel, 1964 (Rough) 1725
706, 1966 (Fair) 1900*
706, 1963 (Fair) 2200*
756, 1970 (Fair) 4400*
756 diesel, 1968 (Good) 5800*
766 diesel, 1973 (Fair) 7250*
766, 1975 (Good) 4450*
766, 1976 (Fair) 4650*
806, 1966 (Good) 2350*
806, 1965 (Good) 3500*
806, 1965 (Good) 2800
806, 1965 (Good) 2850*
806 diesel, 1964 (Fair) 3850
806 diesel, 1966 (Good) 4650*
856 diesel, 1967 (Good) 6800*
856 diesel, 1967 (Good) 6500*
986 cab, 1977 (Good) 9000
1066, cab, 1976 (Good) 9300*
1066 diesel, 1974 (Good) 8150*
1206 diesel, cab, 1968 (Good) 5600*
1206 diesel, cab, 1963 (Fair) 4800*
1256 diesel, 1970 (Good) 5225*
1456 diesel, 1969 (Fair) 7000
1466, cab, 1976 (Good) 8400
1468, cab, 1975 (Good) 8500
1466 diesel, 1973 (Fair) 7500*
1466 diesel, 1971 (Good) 7000
1468, cab, 1972 (Good) 4925
1486, cab, 1978 (Good) 14,000*
1486, cab, 1979 (Good) 16,500*
1486, cab, 1976 (Good) 15,800*
1586, cab, 1980 (Excellent) 17,500*
1586, cab, 1977 (Rough) 12,000*
3588 diesel, 1978 (Good) 18,000*
3788 diesel, 1981 (Excellent) 26,000*

OLIVER TRACTORS

77, 1952 (Rough) 625
1650 diesel, 1965 (Fair) 3500
1650 diesel, 1968 (Fair) 3400*
1755, cab, 1972 (Fair) 5300*
1850, 1966 (Fair) 2500
1855 diesel, 1972 (Fair) 4600*

JOHN DEERE TRACTORS

G, 1945 (Rough) 525*
M, 1949 (Fair) 775*
40, 1954 (Fair) 775*
40, 1955 (Fair) 950*
70, 1955 (Fair) 925*
720 diesel, 1956 (Fair) 1100*
720 diesel, 1957 (Fair) 1050*
820 diesel, 1957 (Fair) 1700*
830 diesel, 1959 (Fair) 1900*
2020 diesel, 1970 (Fair) 3700*
2630 diesel, 1975 (Fair) 6100
3020, 1967 (Fair) 3150*
4010 diesel, 1964 (Fair) 4000
4010 diesel, 1962 (Fair) 4700*
4010 diesel, 1963 (Good) 3900*
4010 diesel, 1963 (Fair) 4500*
4010 diesel, 1963 (Good) 4400*
4020 diesel, 1965 (Fair) 4800
4020 diesel, 1968 (Good) 5350
4020 diesel, 1966 (Good) 6150*
4020 diesel, cab, 1969 (Good) 8900*
4020 diesel, 1969 (Fair) 5500
4020 diesel, 1966 (Good) 5800*
4020 diesel, 1970 (Good) 7700*
4020 diesel, 1968 (Fair) 5350
4020 diesel, 1965 (Fair) 5050
4020 diesel, 1965 (Good) 5200
4320, cab, 1972 (Good) 8400*
4430, cab, 1977 (Good) 12,250*
4430, cab, 1977 (Good) 11,750*
4430, cab, 1976 (Good) 12,400
4630 diesel, 1977 (Good) 15,700*
5010 diesel, 1965 (Fair) 3600
5020, cab, 1969 (Fair) 4400*
3120 diesel, 1972 (Good) 3800

2130 diesel, 1974 (Fair)	3700
DAVID BROWN TRACTOR	
880, (Fair)	1500*
CASE TRACTORS	
SC, 1945 (Fair)	375*
DC, 1944 (Fair)	600
580B, Idr.,	3250
580B, Idr., (Fair)	3700*
930,	1850
930 diesel, cab, 1965 (Fair)	1700*
930, 1967 (Good)	2500*
930, 1967 (Fair)	2500*
930 diesel, cab, 1968 (Fair)	2600
1030 diesel, 1966 (Fair)	2200
1030 diesel, 1967 (Fair)	2975
2470, (Fair)	12,500*
BELARUS TRACTOR	
500 diesel, (Fair)	1525
LONG TRACTOR	
9500 diesel, 1975 (Good)	3350*
FERGUSON & MASSEY FERGUSON TRACTORS	
TK-20, 1945 (Rough)	500*
65, 1962 (Rough)	1175*
65, 1961 (Good)	1850
135 diesel, 1970 (Fair)	3350
150 diesel, 1972 (Fair)	2950*
165 diesel, 1971 (Fair)	3375
165, 1969 (Fair)	2950*
175, 1967 (Rough)	2350
1085 diesel, Idr., 1977 (Good)	7000*
1085 diesel, 1976 (Fair)	5300*
1100 diesel, 1965 (Fair)	3650
1130 diesel, cab, 1970 (Good)	5200
1130 diesel, 1967 (Rough)	4600*
1135 diesel, cab, 1978 (Good)	8000
1155 diesel, 1978 (Good)	9500*
1800 diesel, 1974 (Fair)	7000*
1805 diesel, 1977 (Rough)	8250*
2805, cab, 1976 (Good)	16,000*
FORD TRACTORS	
8N, 1952 (Rough)	925
8N, 1952 (Fair)	1400
8N, 1950 (Good)	1275
8N, 1949 (Fair)	1150
8N, 1950 (Fair)	1275
8N, 1952 (Rough)	1250
8N, 1950 (Rough)	950*
9N, 1940 (Rough)	550
Jub. Idr., 1953 (Good)	1975
600, 1955 (Good)	1750*
2000, Idr., 1959 (Fair)	1800*
3000, 1971 (Fair)	3400
3000, 1971 (Good)	3800
3400, Idr., 1973 (Fair)	3800
5000 diesel, 1973 (Good)	4700*
5000 diesel, cab, 1975 (Good)	6150
7000 diesel, cab, 1973 (Rough)	4150
8000 diesel, 1971 (Fair)	3775
8000, cab, 1971 (Rough)	6250*
9600, cab, 1975 (Fair)	7800*
1700 diesel, 1981 (Good)	3050
MASSEY-HARRIS TRACTORS	
44, 1950 (Rough)	400
Pony, 1950 (Fair)	700*
MINNEAPOLIS-MOLINE TRACTORS	
G-1000 diesel, 1964 (Rough)	1800
G-1000 diesel, Vista, (Fair)	2800*
UB, 1947 (Rough)	450
ZB, 1946 (Rough)	450*
ALLIS-CHALMERS TRACTORS	
CA, Idr., plow, 1948 (Fair)	610
WD, 1947 (Fair)	400*
WD, 1950 (Fair)	675
WD, 1949 (Rough)	425
WD, 1950 (Rough)	525
WD, plow, 1946 (Rough)	500
WD-45, 1950 (Fair)	635
D-15, 1965 (Rough)	1000*
D-17, 1964 (Rough)	1400*
D-17, 1965 (Rough)	975*
D-19, Idr., 1966 (Rough)	1500*
D-19, 1966 (Fair)	2025
190 diesel, cab, (Fair)	2900*
190XT diesel, 1972 (Fair)	3600
200, cab, 1973 (Good)	7700
210 diesel, 1974 (Good)	6100*
5020 diesel, 1982 (Excellent)	3800*
440, cab, (Fair)	9250*
7030, cab, 1974 (Good)	7350
WHITE TRACTORS	
2-105 diesel, cab, (Good)	11,000*
2-150 diesel, cab, (Fair)	8750*
COCKSHUTT TRACTOR	
30, 1945 (Rough)	300*

NOTES:
Prices reported are for individual sales at wholesale on an "as is," "cash and carry" basis. Prices reported are **not** averages.

Condition Classifications:
EXCELLENT: Engine in perfect condition, 400 to 600 hours of use. Rubber—80% tread remaining, no breaks or cracks. Paint—original and bright. General appearance: excellent.

GOOD: Engine in good running condition. Rubber—70% tread remaining, no breaks or cracks. Paint—original or a good repaint job. General appearance: good over-all.

FAIR: Engine possibly in need of a minor overhaul. Rubber—60% tread remaining, some cracking evident in sidewalls. Paint—only fair, weathered and some rust apparent. General appearance: worn, some dents, minor parts (gage covers, etc.) missing or broken.

ROUGH: Engine obviously in need of a major overhaul. Rubber—smooth. Paint—scarred, weathered, rusty. General appearance: dents, ruptures, broken parts, loose wires, components (such as lights) broken, missing or inoperative.

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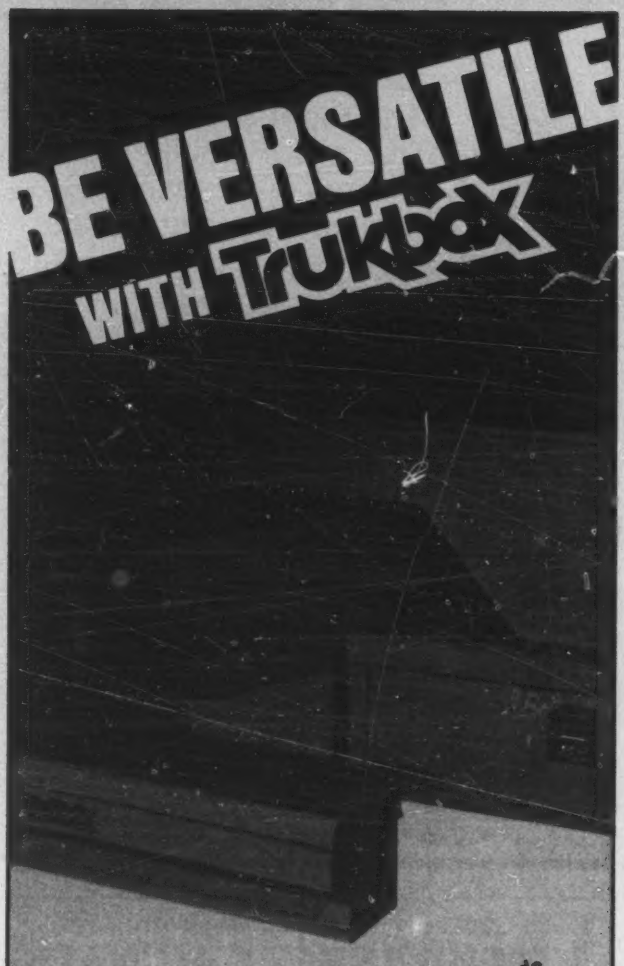

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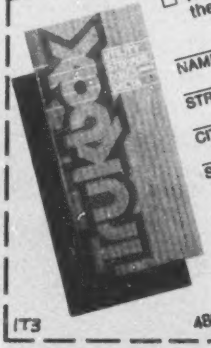

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May 1983
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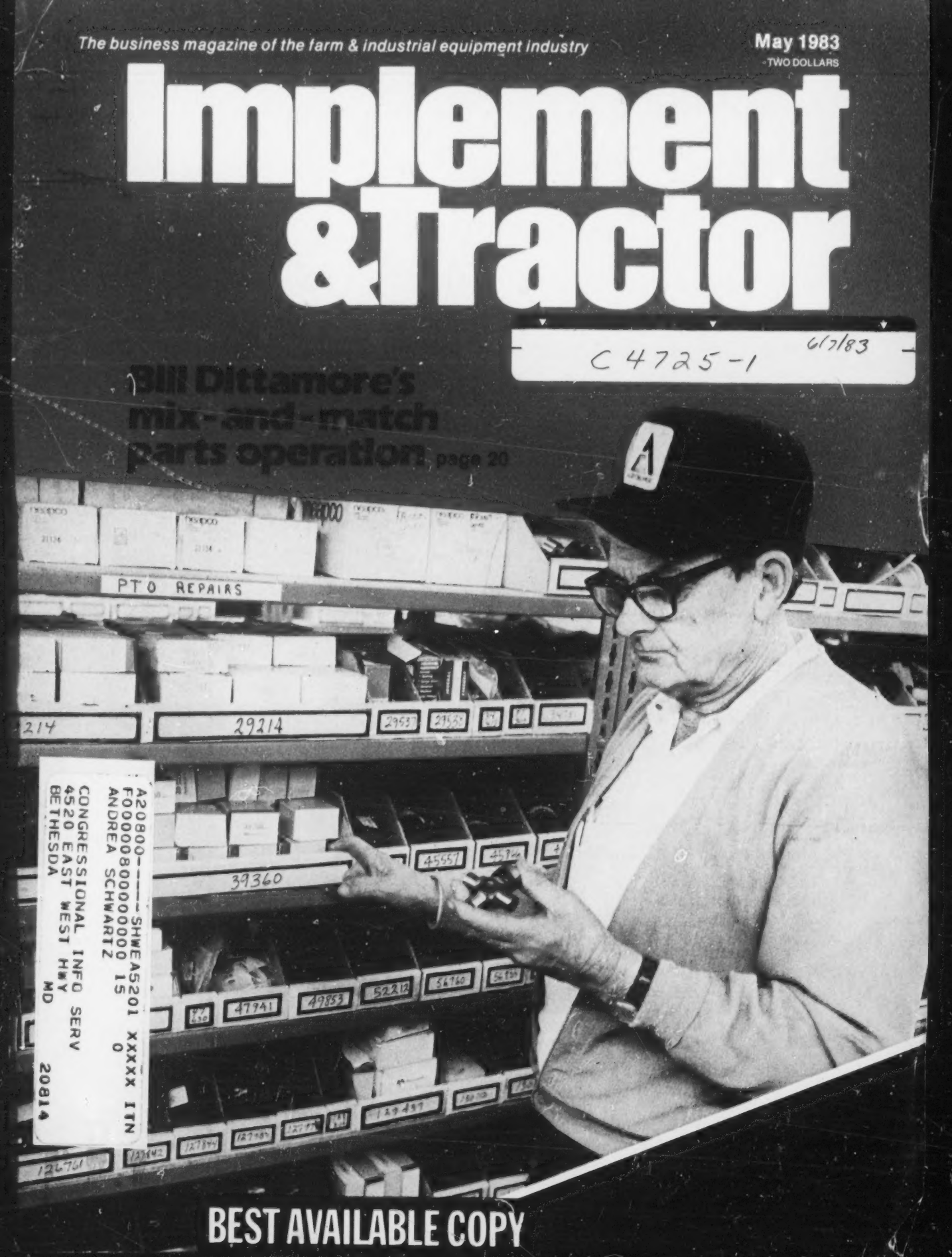
Implement & Tractor

C4725-1 6/7/83

Bill Dittamore's mix-and-match parts operation page 20



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Editorial, advertising
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9221 Quivira Rd.
P.O. Box 12901
Overland Park, Kan. 66212
(a suburb of Kansas City, Mo.)
Telephone (913) 888-4664
Telex: 42-4156; Answerback
Intertec OLPK

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IMPLEMENT & TRACTOR (USPS 461-750), with which is combined Farm Implement News, is published monthly except in January and March, when two issues are published, by INTERTEC PUBLISHING CORP., 9221 Quivira Rd., Overland Park, KS 66215 (a suburb of Kansas City, Mo.).

Subscription Information: Implement & Tractor is edited for persons in the farm and industrial equipment industry who function in the areas of retail sales and service, distribution sales and service, marketing, engineering, financing, manufacturing and general management. Subscription prices to qualified subscribers: U.S. one year – $10, two years – $15; elsewhere including Canada, one year – $17, two years – $25. Subscription prices to all others: U.S. one year – $34, two years – $68; elsewhere including Canada, one year – $39; two years – $78. Single copies, $2, except Annual Statistical Number, $4; Product File issue, $5; Red Book issue, $5. Adjustment necessitated by subscription termination at single copy rate. Extra charge for service on back issues. Allow 6-8 weeks for change of address and new subscriptions.

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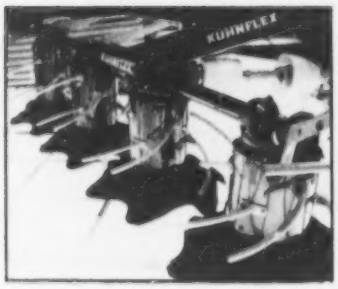
ISSN 0019-2953/81 $2.00 + 0.00

INTERTEC PUBLISHING CORP.

Implement &Tractor

The business magazine of the farm & industrial equipment industry

May 1983 • Vol. 98 • No. 7



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8: Service Managers: They Like Their Work, But Want to Learn More. Recognition, more involvement and better compensation would be welcome too, according to a university study.

12: Scouting Out SIMA. Report from the world's biggest farm equipment show, showcase for the best of European machinery.

18: Finding the Right Computer. With new features that allow expansion and flexibility, modern data processing systems let a dealer start small and grow, or revive an outmoded system he already owns. Second in a series by W. David Shoup.

20: Mixing and Matching: It's Building Parts Volume at Dittamore's. This Illinois dealership learned which of its wholegoods parts fit other brands of equipment. The plan is building traffic, taking care of customers' needs – and growing.

22: What Makes Farmers Buy? Not all farmers are the same when it comes to making big purchases, reports a Kansas State University study.

On the cover...A look at Dittamore's growing mix-and-match parts department.

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This publication is indexed in Bell & Howell's Farm & Garden Index.

Second class postage paid at Shawnee Mission, KS 66201. Postmaster:
Return Form 3579 to Implement & Tractor, P.O. Box 12954, Overland Park, KS 66212

I&T Update

U.S. and Canadian Unit Retail Sales

	March			January-March		
Farm Wheel Tractors	**1983**	**1982**	**Pct. Change**	**1983**	**1982**	**Pct. Change**
Two-wheel drive						
Under 40 HP	4,606	4,132	11.4	8,930	8,709	2.5
40 to 99 HP	3,213	3,982	(19.3)	8,295	9,895	(16.2)
Canada 40-99	499	605	(17.5)	1,275	1,619	(21.2)
100 to 140 HP	1,181	1,896	(37.7)	3,610	5,854	(38.3)
140 HP and over	864	1,061	(18.6)	2,326	3,099	(24.9)
Canada over 100	457	600	(23.8)	1,083	1,454	(25.5)
Four-wheel drive						
Under 200 HP	145	393	(63.1)	405	1,010	(59.9)
Over 200 HP	244	304	(19.7)	568	917	(38.1)
Canada	230	326	(29.4)	508	725	(30.3)
Total U.S.	**10,253**	**11,770**	**(12.9)**	**24,134**	**29,484**	**(18.2)**
Total Canada*	**1,186**	**1,531**	**(22.5)**	**2,866**	**3,798**	**(24.5)**
S-P Combines	602	486	23.9	3,105	2,370	31.0
Canada	93	121	(23.1)	279	354	(21.1)
Pull Combines (Can.)	31	24	29.1	167	83	101.2
Mower-Conditioners	803	556	44.4	1,773	1,563	13.4
Canada	130	61	113.1	281	181	55.2
Forage Harvesters**	161	167	(3.6)	479	615	(22.1)
Canada	49	32	53.1	110	83	32.5
Balers (200-lb bales)	521	318	63.8	1,236	916	34.9
Canada	110	54	103.7	274	178	53.9
Large Balers (Canada)	157	54	190.7	303	177	71.7
Swathers (Canada)						
Pull-Type	34	51	(33.3)	134	185	(27.5)
Self-Propelled	81	70	15.7	223	242	(7.8)

*Canada: 40 HP and over. **Shear-bar type.

Sources: Farm & Industrial Equipment Institute (312) 321-1470; Canadian Farm & Industrial Equipment Institute (416) 632-8483.

Industry Numbers: Any PIK Impact Yet?

Retail sales data for North America show a contrasting picture. Combine sales are up (except in Canada) and tractor sales are down (except for Japanese imports). The combine activity is attributed by several watchers to intense dumping of excess inventory. But big tractor inventories are high, too. The jump in hay tools is attributed to alternate use for PIK-idled land, but Canada's hay tool sales have jumped, and there's no PIK there. Dealers I&T has talked to say they and their farmers are the most optimistic they've been in years, but apart from combines, the big stuff isn't moving yet (as of mid-April).

Ag Engineers' Summer Meeting at Montana State U.

The American Society of Agricultural Engineers conducts two national meetings yearly. The Winter Meeting is held in downtown Chicago in December. The Summer Meeting is held at a different land-grant agricultural school every June, and this time it's Montana State U. at Bozeman.

The gathering is structured around three days of working sessions at which papers are presented. I&T counts 76 sessions this year at which 531 papers are scheduled to be read. Other events include general sessions with featured speakers, a "micro-mini tractor pull," and a Big Sky Barbecue. There's more information available from ASAE at 616/429-0300.

FEMA Sampling: Orders, Expectations Are Up

The Farm Equipment Manufacturers Assn., surveying a sampling of its members who have reported over the past three years, announces that as of March 1, orders were up a median of 8 per cent over a year earlier. This was the first increase recorded in three years.

Thirty per cent of reporting manufacturers said they believe a pickup has already begun and another 60 per cent anticipate the pickup will begin before November. Twenty-four per cent have increased work forces since last November. Thirty-five per cent experienced "a considerable pickup" in sales during January and February.

Farm Equipment Leasing: $4.5 Billion by 1985?

Predicasts, a business information and research firm, has taken a look at farm equipment leasing in *Capital Equipment Leasing Markets* (study 292, priced at $1,095) and pronounced it one of the fastest growing market segments. For one reason, U.S. agriculture is "locked in an unavoidable need to acquire capital equipment at a more rapid rate than earnings and credit can support."

Predicasts says that farm equipment leases went up an average of 18 per cent a year from $240 million in 1967 to $2.6 billion in 1981 and should move to $4.5 billion in 1985 and $10 billion in 1990....all capital leases, no operating leases. Predicasts says there were $4 billion of farm equipment leases in place in 1977, $10.07 billion by 1981 and that there will be $16.7 billion in place in 1985 and $32.5 billion by 1990.

How about rentals? Predicasts says that almost $600 million of rental equipment was provided in 1981, about $20 million by cooperatives, the rest by dealers.

(Predicasts is located at 11001 Cedar Ave., Cleveland, Ohio 44106.)

Profiling the Service Manager

Age	
Youngest	20 years
Oldest	70 years
Average	38.9 years
Years in Current Position	
Shortest	4 months
Longest	35 years
Average	7.25 years
Education	
College graduate	22 per cent
Some college	32 per cent
High school graduate	35 per cent
Some high school	11 per cent
Salary	
$15-19,999	45 per cent
$20-24,999	41 per cent
$25-29,999	8 per cent
$30-34,999	5 per cent
Over $35,000	1 per cent
Annual Bonus	
None	29 per cent
Less than $1,000	45 per cent
$1,000-1,999	10 per cent
$2,000-2,999	9 per cent
Over $3,000	9 per cent
Weekly Work Schedule	
40-45 Hours	43 per cent
46-50 Hours	43 per cent
51-55 Hours	8 per cent
56-60 Hours	6 per cent
Over 60 Hours	0 per cent
Number of Persons Supervised	
Lowest	1 person
Highest	17 persons
Average	5.6 persons
Estimated Annual Shop Sales	
Lowest	$ 50,000
Highest	$1,000,000
Average	$ 212,600

Service Managers: What They Like *Most* About Their Jobs

Area	Importance Factor
Challenge	41 per cent
Dealing with customers	39 per cent
Freedom to operate the shop	38 per cent
Company reputation	28 per cent
Trust of the company	28 per cent
Job security	27 per cent
Responsibility	18 per cent
Treatment by supervisor	16 per cent
Company interest in personnel	15 per cent
Dealing with employees	14 per cent
Leadership	11 per cent
Work schedule	11 per cent
Salary	8 per cent
Benefits package	5 per cent
Authority	4 per cent
Planning	3 per cent
Bonus system	1 per cent

Service Managers' Jobs: What Do They Like Least?

Area	Importance Factor
Bonus system	32 per cent
Dealing with employees	28 per cent
Planning	28 per cent
Work schedule	27 per cent
Benefits package	24 per cent
Authority	22 per cent
Dealing with customers	16 per cent
Salary	15 per cent
Responsibility	12 per cent
Company interest in personnel	11 per cent
Job security	9 per cent
Leadership	9 per cent
Challenge	8 per cent
Treatment by supervisor	7 per cent
Freedom to operate the shop	7 per cent
Company reputation	3 per cent
Trust of the company	0 per cent

Service managers: They like their work, but want to learn more

Recognition, more involvement and better compensation would be welcome, too, according to a university study.

By Richard A. Edwards

The author is an agribusiness economist at Texas A&M U. This report stems from a survey of 76 farm equipment dealerships' service managers.

■WILL A PAT on the back and a $5 raise provide enough encouragement and reward to satisfy the farm equipment dealership's service manager?

Not too many years ago, that might have been enough. But it's a different, more complex society today. It takes plenty of knowledge to oversee the repair of today's complicated mechanical and electronic systems. And there

(More...)

Service Managers Rate Their Responsibilities

Responsibility	Importance Factor
Customer relations	79 per cent
Maintaining a high service level	69 per cent
Shop productivity	63 per cent
Controlling expenses	47 per cent
Returning a net profit	44 per cent
Correct pricing of tickets	37 per cent
Planning & scheduling	35 per cent
Employee morale	33 per cent
Employee training	33 per cent
Hiring qualified employees	23 per cent
Keeping equipment in good repair	15 per cent
Shop cleanliness	15 per cent
Shop-parts relationship	9 per cent

Managers Rate Personal Pros & Cons

Five Most Positive Ratings

Rank	Statement
1	The company has a good reputation in the community
2	The company has a good reputation for customer service
3	Management is committed to having a profitable shop
4	I understand how well I am expected to do my job
5	I understand my duties and responsibilities

Five Most Negative Ratings

Rank	Statement
1	I have opportunity for promotion
2	My initial training for this job was adequate
3	I receive recognition for a job well done
4	I am fully informed about the company goals & objectives
5	I have respect and confidence in manufacturer's representatives

Service Managers *(continued)*

Service Managers Want to Learn More

In Which of the Following Basic Skills Do You Need Most Improvement?

Speaking skills	37 per cent
Business math	34 per cent
Reading	14 per cent
Writing	13 per cent

In Which of These Technical Areas Do You Feel Your Skills are Most Inadequate?

Computer systems	60 per cent
Accounting	45 per cent
Reading & understanding financial statements	42 per cent
Advertising & promotion	32 per cent
Motivating others	27 per cent
Technical skills needed to run my shop	21 per cent
Training employees	18 per cent
Planning & organizing the shop's work	18 per cent
Supervising employees	14 per cent
Employee relations	11 per cent
Customer relations	8 per cent

have been substantial changes in what is expected in dealing with other people.

Despite these apparent changes, results of a recent survey, taken among farm equipment service managers in Texas, Oklahoma and New Mexico, suggest that these managers still crave many of the rewards of their earlier counterparts. They want recognition for a job well done. They want proper training for the job. They have a willingness and a desire to be included as part of the dealership's management team. And they also indicate a strong desire for a better compensation package.

Likes, dislikes

Today's manager, when asked to respond to the *likes* and *dislikes* about his job, clearly indicates displeasure with the total compensation picture. In the top five items *liked least* about their job, managers placed three items dealing with compensation: *bonus system, work schedule* and *benefits package.*

While the long hours aspect of the job has improved over the years, the distaste most likely is because of its contrast with national trends of working fewer hours for the same or improved compensation.

The other two items, which are apparently quite distasteful to the managers, are dealing with employees and planning. Those are two of the most important aspects of a manager's role, yet, about one in three managers indicated that this portion of the job was unattractive.

On the positive side – the *likes* – the most apparent was the manager's attitude toward his working environment. When asked about the most gratifying elements in his job, managers mentioned *challenge, dealing with customers, freedom to operate the shop, trust of the company, company reputation* and *job security* most often. Except for the customer relations element, the rest of those mentioned are exclusively items describing the work environment.

Thus, based on the lists of likes and dislikes, it appears that most managers feel they are allowed to operate their service departments in an at-

(Continued on page 23)

What makes farmers buy?

Not all farmers are the same when it comes to making big purchases, reports a Kansas State University study.

■ARE YOU ready for this, Mr. Dealer? Can your ego stand a little bruising?

A group from Kansas State U. wanted to learn who was most important to farmers when they made big-ticket purchases of implements and tractors.

Survey workers, directed by Dr. Wayne Norvell of the KSU marketing department, asked 61 dealers to rank the social and business contacts that influence farmers to buy, and 35 of the dealers (57 per cent) gave *themselves* top billing.

And how did farmers answer the same question? Of 207 farmers surveyed, only 47 (23 per cent) said the dealer was the most important.

Family counts

"The spouse and other family members are the two most important influences," Norvell concludes, noting that 128 of the farmers (62 per cent) said they paid most attention to their kin.

The survey, completed in 1979, used a randomly-selected sample of farmers and dealers from across Kansas. Norvell said he believes the results give a reasonable picture of how farmers in general make purchase decisions, although the survey results cannot properly be statistically projected across the U.S.

The survey, he said, is notable because it looks at how factors like age, years of farming, farm size and level of education affect the thinking of farmers.

Service makes sales

For example, Norvell found that all categories of farmers "rank service as the most important characteristic for dealers to have," with dealer reliability and trade-in policy also ranking strongly.

That unity breaks down, though, when the farmers are separated into age and experience groups. Farmers under age 30 and those with less than five years' experience are most likely to ask opinions of neighbors and friends and take account of perceived product quality. These young farmers also want more product information from dealers than do other groups.

The image of the self-reliant farmer comes through in the results, with almost 90 per cent rating past experience as the single biggest buying influence.

Yet a host of other factors show up to influence purchases: family tradition gets stronger as the farmer gets older; product warranty meant nothing to farmers with a college degree; farmers holding more than 900 acres listened more to their dealer and less to their spouse than farmers with smaller holdings.

Free copies

"It is our intention to help the dealer recognize the major points of emphasis in marketing his equipment in his market segment," Norvell said. "It is hoped that this information can be used as a guideline for dealer awareness of farmer buying behavior."

For anyone who'd like to ponder the survey results in more depth, free copies are available from Dr. Wayne Norvell, KSU Marketing Dept., Calvin Hall, Manhattan, Kan. 66506.

I&T

What farmers want in a dealer:

Conclusions for dealers: Offer service, trade-in value, be honest, and keep quality products on hand. Give information on product, especially to farmers under age 30. Atmosphere, reputation and reliability don't seem to matter much.

Dealer Characteristics

Figures are a per cent of total.

Age	Service	Atmosphere	Trade-In	Product Information	Reputation	Reliability	Quality and Availability	Honesty	Total Number Of Respondents
Under 30	35		10	40			5	10	20
31-40	40	6	16	13	3		13	9	32
41-50	31	4	20	14			12	11	56
51-60	42	4	21	4	2		10	15	52
Over 60	40	4	22	13	2	2	9	7	54
Total	**40**	**4**	**19**	**14**	**1**	**0.5**	**11**	**11**	**214**

Who sways a buying decision?

The wife and relatives are a bigger influence on farmers' buying decisions than dealers. Friends and neighbors also carry clout, while factory reps count for almost nothing.

Social and Business Factors

Figures are a per cent of total.

Years of Farming	Neighbors	Friends	Spouse	Other Family Members	Dealers	Factory Representative	Total Number Of Respondents
0-5	18		36	36		9	11
6-10	8	8	17	38	25	4	24
11-15	5		43	28	24		21
16-20	3	6	47	26	16		30
21 & Over	11	4	36	22	26	0.9	114
Total	**9**	**4.5**	**36**	**26**	**23**	**1.5**	**200**

Service Managers

(Continued from page 10)

mosphere that allows a high degree of freedom. Conversely, many managers feel uncomfortable with the managerial side of the job and there appears to be a high degree of dissatisfaction with the overall compensation package.

Job responsibilities

Turning to job responsibilities, managers view customer relations as their most important responsibility. The next four highest rated items are: *high service level, productivity, controlling expenses,* and *obtaining a net profit.*

All relate to managerial attributes that deal with the financial aspects and productivity of the shop. Least important job duties among the alternatives were shop-parts relationships, shop cleanliness, and keeping equipment in good repair.

Shop managers and their supervisors appear to be in harmony on what are the managers' most important responsibilities. The managers top five selections were also the top five that he felt his supervisor saw as his main responsibilities. The order was slightly rearranged.

In the area of personal improvement, the managers indicated *business math* and *speaking skills* as areas they would like to improve.

Skills improvement

The question relating to technical skills improvement indicated an overwhelming desire to learn more about *computers* and *computer systems.* This was followed closely by two items relating to the financial side of the business—*accounting systems* and *understanding financial statements.* The fourth most popular response was advertising and promotion and this was followed by motivating others.

The diversity of the top five selections perhaps indicates the service manager's eagerness to be a complete manager rather than the person in the corner office whose only concern is shop operations.

This may also indicate that owners are expecting input into improving service operations by involving managers more in financial results, advertising, etc., but are not educating or preparing them to provide this input. Whatever the reason, the results of this particular question should give insight to owners as to educational programs of interest to their service department managers.

Rating the company

When offered the chance to rate their own companies, the managers gave good marks to their employers' reputation both in the community and for service. They also felt they were communicating well on the goals, duties and responsibilities of their job. They also felt management was committed to a profitable shop.

The most negative ratings dealt primarily with human relations. Promotion opportunities were not readily foreseeable. Initial training was not seen as adequate.

It also appears that management is failing to provide the positive reinforcement on job performance and communication on company direction. Both are essential in order to build strong manager-management relationships.

Summary

It is apparent that dealers are communicating to their service department managers what their major duties and responsibilities are. It also appears that the managers feel good about their work environment.

However, they would like more educational opportunities in areas where they are becoming increasingly more responsible. They would also appreciate recognition for a job well done, a chance to become more involved in total dealership management and a more attractive benefits package. I&T

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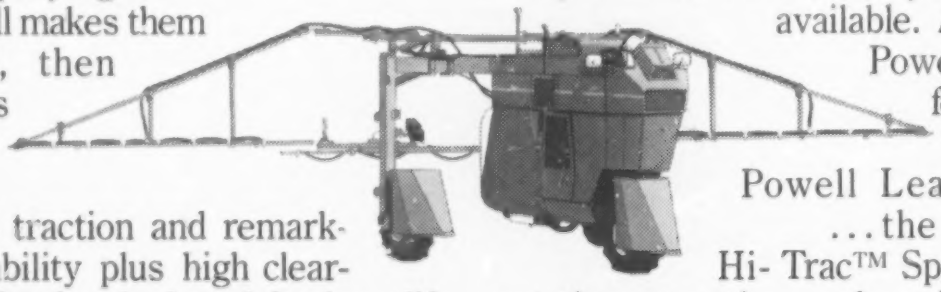

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